PRO V&V

VERIFICATION VALIDATION

Test Report

Dominion Voting Systems (DVS)
D-Suite 5.5-A (GA)
Certification Testing

Approved by: _____

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1.0 INTRODUCTION

The purpose of this Test Report is to document the procedures that Pro V&V, Inc. followed to perform testing on the Dominion Voting Systems (DVS) Democracy Suite 5.5-A Voting System (D-Suite 5.5-A), as used in the State of Georgia, to the requirements set forth for voting systems in the U.S. Election Assistance Commission (EAC) 2005 Voluntary Voting System Guidelines (VVSG), Version 1.0.

1.1 References

The documents listed below were utilized in the development of this Test Report:

- Dominion Voting Systems ECO 100647 State Level Testing Scope
- Election Assistance Commission (EAC) 2005 Voluntary Voting System Guidelines (VVSG) Version 1.0, Volume I, "Voting System Performance Guidelines", and Volume II, "National Certification Testing Guidelines"
- National Voluntary Laboratory Accreditation Program NIST Handbook 150, 2016 Edition, "NVLAP Procedures and General Requirements (NIST Handbook 150)", dated July 2016
- National Voluntary Laboratory Accreditation Program NIST Handbook 150-22, 2017 Edition, "Voting System Testing (NIST Handbook 150-22-2017)", dated July 2017
- Pro V&V, Inc. Quality Assurance Manual, Revision 7.0
- United States 107th Congress Help America Vote Act (HAVA) of 2002 (Public Law 107-252), dated October 2002
- Election Assistance Commission Testing and Certification Program Manual, Version 2.0
- Election Assistance Commission Voting System Test Laboratory Program Manual, Version 2.0
- EAC Requests for Interpretation (RFI) (listed on www.eac.gov)
- EAC Notices of Clarification (NOC) (listed on www.eac.gov)
- Dominion Voting Systems 5D-Suite 5.5-A GA Technical Data Package *(A listing of the TDP documents submitted for this test campaign is included in Section 3.3.1 of this Test Report)*

1.2 Terms and Abbreviations

"ADA" –Americans with Disabilities Act

"COTS" – Commercial Off-The-Shelf

"EAC" – Election Assistance Commission

"EMS" – Election Management System

"FCA" – Functional Configuration Audit

"HAVA" – Help America Vote Act

"ICC" – ImageCast Central Optical Ballot Counter

"ICP" – ImageCast Precinct Optical Ballot Counter

"ICX" – ImageCast X Ballot Marking Platform

"PCA" – Physical Configuration Audit

"TDP" – Technical Data Package

"VSTL" – Voting System Test Laboratory

"VVSG" – Voluntary Voting System Guidelines

1.3 Description of Modification

Dominion's D-Suite 5.5-A (GA) Voting System is based on the previously EAC-certified components from the Democracy Suite 5.5-A platform.

- Democracy Suite Election Management System (EMS) software platform
- Democracy Suite ImageCast Precinct (ICP) optical ballot counter
- Democracy Suite ImageCast Central (ICC) optical ballot counter
- Democracy Suite ImageCast X (ICX) ballot marking platform

Dominion's ECO 100647 introduces the DR-G2140 scanner to support the D-Suite 5.5-A (GA) system configuration. Due to the previously approved Canon DR-G1130 going End of Life (EOL), the Canon DR- G2140 scanner is the manufacturer's recommended replacement.

1.4 Scope of Testing

Pro V&V performed an evaluation of the results from the previous test campaign along with the changes made to the system to determine the scope of testing required for the submitted modification. It was determined the following tasks would be required to verify compliance of the modifications:

- Technical Data Package (TDP) Review

  A limited TDP Review was performed to ensure that all submitted modifications were accurately documented and that the documents meet the requirements of the EAC VVSG, Version 1.0.

- Physical Configuration Audit (PCA), including Security Testing

  A PCA was performed to compare the voting system submitted for certification testing to the manufacturer's technical documentation.

- Source Code Review, Compliance Build, Trusted Build, and Build Document Review

  The source code review was based on the source code changes made since the previous system was certified. Build document review was performed to ensure that all required equipment and software were current during the building process. A compliance build was created after the reviews. Once the integrity of the compliance build was verified, the trusted build was created.

- Accuracy Testing

  The Accuracy Test was performed to ensure the D-Suite 5.5-A (GA) correctly captured, stored, consolidated, and reported the specific ballot selections, and absence of selections, for each ballot position.

- System Integration Testing

  System Integration Testing, including Functional Regression Testing, was performed to evaluate compatibility of the voting system software components and subsystems with one another and with other components of the voting system as a whole. During test performance, the system was configured as would be for normal field use.

2.0 TESTING OVERVIEW

The evaluation of D-Suite 5.5-A (GA) was designed to verify that certain features and applications, which have been modified from the certified baseline system, conform to the applicable EAC VVSG 1.0 requirements. The evaluation addressed each of the test goals in the following manner:

Table 1-1: Testing Overview

Test Goal	Testing Response
Perform Source Code Review of any modified source code, generate Trusted Builds, and perform a Build Documentation Review	Trusted Builds were generated for the D-Suite 5.5-A (GA) components during the test campaign. The source code submitted by DVS was reviewed by Pro V&V and was successfully built using the submitted COTS and third-party software products. Additionally, build documentation was reviewed.

Table 1-1: Testing Overview *(continued)*

Test Goal	Testing Response
Accuracy Testing	Accuracy Testing was performed to verify that the voting system components could accurately process ballot selections, transmit selections back to the EMS, and produce accurate totals.
System Integration (including FCA and Regression Testing)	System Integration and FCA testing were conducted to verify system functionality.
Perform PCA, System Setup, Loads, and Hardening, & Receipt Inspection	A PCA, system setup, loads, and hardening, and Receipt Inspection were performed to compare the voting system components and materials submitted for testing against the manufacturer's technical documentation.
Limited TDP Review	A limited TDP Review was performed to ensure that all submitted modifications were accurately documented and that the documents meet the requirements of the EAC VVSG, Version 1.0
Volume & Stress	The Volume & Stress Test consisted of tests designed to investigate the system's response to conditions that tend to overload the system's capacity to process, store, and report data.

2.1 Test Candidate

A description of the system tested, as taken from the manufacturer's submitted technical documentation, is provided in the paragraphs below.

D-Suite 5.5-A (GA) includes the following Democracy Suite components: Election Management System (EMS) software platform, Adjudication, ImageCast Precinct (ICP) optical ballot counter, ImageCast Central (ICC) optical ballot counter, and ImageCast X (ICX) ballot marking platform.

Election Management System (EMS)

The Democracy Suite Election Management System (EMS) represents a set of N-Tier software applications for pre-voting and post-voting election project activities that are applicable to jurisdictions of various sizes and geo-political complexities. The Democracy Suite EMS platform is available in two hardware configurations, Express and Standard.

ImageCast Precinct (ICP) Ballot Counter

The ImageCast Precinct (ICP) Ballot Counter is a precinct-based optical scan ballot tabulator that is used in conjunction with ImageCast compatible ballot storage boxes. The system is designed to scan marked paper ballots, interpret voter marks on the paper ballot, and safely store and tabulate each vote from each paper ballot. The ICP also supports enhanced accessibility voting through optional accessories connected to the ImageCast unit. In combination with ImageCast X ballot marking platform, ICP provides capability to review and verify QR ballots produced by the ImageCast X ballot marking platform.

ImageCast Central (ICC)Ballot Counter

The Democracy Suite ImageCast Central system consists of a central, high-speed, optical scan ballot counter (tabulator) called the ImageCast Central (ICC) Ballot Counter and is used for processing absentee ballots (such as vote by mail). This ballot counter unit is based on COTS hardware coupled with custom made ballot processing application software. It is used for high-speed, accurate and reliable centralized scanning and counting of paper ballots.

ImageCast X (ICX) Ballot Marking Platform

The Democracy Suite ImageCast X (ICX) ballot marking platform is a solution that is used for creation of paper Electronic Mobile Ballots. These ballots are later scanned and tabulated by the ImageCast Central optical ballot counter and/or scanned, verified and cast on the ImageCast Precinct. The ICX also supports enhanced accessibility voting through optional accessories connected to the ImageCast X unit.

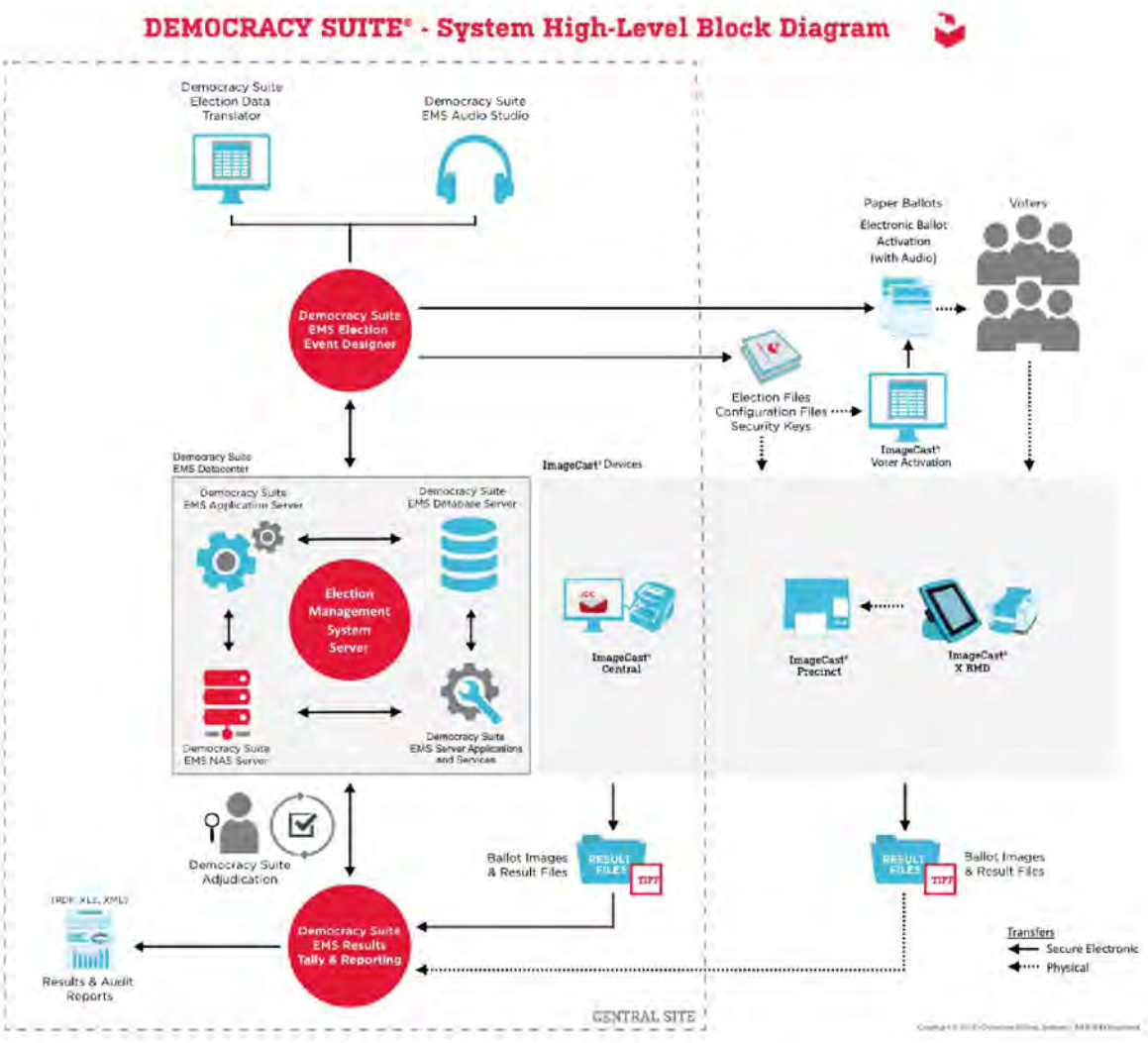

Figure 2.1 Voting System Overview

The specifications for the components of the D-Suite 5.5-A (GA) system configuration are listed below.

Election Administration

Democracy Suite Election Management System (EMS)

- Dominion Voting Systems Democracy Suite EMS 5.5.12.1, containing:
  - Election Event Designer
  - Results Tally and Reporting

- Audio Studio
- Application Server
- Election Device Management Server
- Data Center Manager
- File System Service
- Adjudication Service
- Election Data Translator

- DCF version 5.4.01_20170521
- MCF version 5.5.10.19_20180706
- Optional Adjudication 5.5.8.1

COTS Hardware and Software

- EMS Standard Server Configuration
  - Microsoft Windows Server 2012 R2
  - Microsoft SQL Server 2016 Standard
  - Server computer system per 2.02 Democracy Suite System Configuration Overview
- EMS Express Server Configuration
  - Microsoft Windows 10 Professional
  - Microsoft SQL Server 2016 Express with Advanced Services
  - Desktop computer system per 2.02 Democracy Suite System Configuration Overview
- Client Workstation Configuration
  - Microsoft Windows 10 Professional
  - Desktop computer system per 2.02 Democracy Suite System Configuration Overview
- EMS COTS Software common to Standard and Express configurations
  - Microsoft.Net Framework 4.5
  - Microsoft.Net Framework 3.5

- Microsoft IIS (part of the Windows installation, not a separate item)
- Microsoft Visual J# 2.0
- Microsoft Visual C++ 2015 Redistributable
- Java SE Runtime Environment 6.0 Update 20 or later
- Dallas 1-Wire Device Driver version 4.03 or newer
- RAID utility
- Adobe Reader DC or later

- Optional COTS Software for Standard and Express configurations
  - Microsoft Windows Defender (Express Server)
  - Avast! anti-virus software (Standard Server)
  - Cepstral Voices (English, Spanish, etc.) 6.2.3
  - Microsoft Excel 2010 or later
  - Additional Fonts (Arial narrow fonts, 2.37a)
  - UPS drivers
  - Printer drivers
- Auxiliary Equipment
  - iButton to 1-Wire USB Adapter: Dallas Maxim DS1402-RP8+
  - iButton Reader/Writer: Maxim DS9490R#
  - Compact Flash Reader: Lexar Professional USB 3.0 Dual-Slot Card Reader
  - Compact Flash Reader: Kingston USB 3.0 High-Speed Media Reader
  - Compact Flash Reader: Hoodman Steel USB3
  - LCD monitor, keyboard, mouse, headset with microphone, audio adapter, networking switch – COTS computing accessories
  - Smart Card Reader: Advanced Card Systems ACR39U
- Election media
  - iButton (Pollworker): Dallas Maxim DS1963S-F5+ (w/Black Key Ring Mount DS9093A+)

- Compact Flash Memory Cards (16GB): Centon C4-CM-CF-16.4
- USB Memory Device (16GB): Centon S4-CM-U3P2-16.1
- USB Memory Device (16GB): Apacer EH353-M APHA016GAG0CG-3TM
- USB Memory Device (8GB): Centon S4-CM-U3P2-8.1
- USB Memory Device (8GB): Apacer EH353-M APHA008GAG0CG-3TM
- Smart Cards: ACOS-6-64

ImageCast Voter Activation (ICVA)

Software version: 5.5.12.1

COTS Hardware and Software

- Client Workstation Configuration
  - Microsoft Windows 10 Professional
  - Desktop computer system per 2.02 Democracy Suite System Configuration Overview
- Auxiliary Equipment
  - Smart Card Reader: Advanced Card Systems ACR39U
- Election Media
  - USB Memory Device (16GB): Centon S4-CM-U3P2-16.1
  - USB Memory Device (16GB): Apacer EH353-M APHA016GAG0CG-3TM
  - USB Memory Device (8GB): Centon S4-CM-U3P2-8.1
  - USB Memory Device (8GB): Apacer EH353-M APHA008GAG0CG-3TM
  - Smart Cards: ACOS-6-64

Central Count

ImageCast Central Count (ICC)

ICC software application: version 5.5.3.3

COTS Software

- ICC COTS computer operating system: Windows 10 (64-bit) Professional edition

- Microsoft Windows Defender
- Microsoft Visual C++ 2015 Redistributable
- Dallas Maxim: 1-wire driver - version 4.03 or newer, 64 bit (32 bit as needed)
- Canon: DR-G2140 driver - version 1.1.11807.24001 SP2

COTS Hardware

- ICC Scanner: Canon DR-G2140
- Desktop or All-in-One computer system per 2.02 Democracy Suite System Configuration Overview
- Auxiliary Equipment
  - iButton to 1-Wire USB Adapter: Dallas Maxim DS1402-RP8+
  - iButton Reader/Writer: Dallas Maxim DS9490R#
  - Compact Flash Reader: Lexar Professional USB 3.0 Dual-Slot Card Reader
  - Compact Flash Reader: Kingston USB 3.0 High-Speed Media Reader
  - Compact Flash Reader: Hoodman Steel USB3
- Election Media
  - iButton: Dallas Maxim DS1963S-F5+ (with Key Ring Mount DS9093A+)
  - USB Memory Device (16GB): Centon S4-CM-U3P2-16.1
  - USB Memory Device (16GB): Apacer EH353-M APHA016GAG0CG-3TM
  - USB Memory Device (8GB): Centon S4-CM-U3P2-8.1
  - USB Memory Device (8GB): Apacer EH353-M APHA008GAG0CG-3TM
  - USB Memory Device (4GB): Verbatim 97087
  - Compact Flash Memory Cards (16GB): Centon C4-CM-CF-16.4

Precinct Vote Capture

ImageCast X with BMD (ICX BMD)

- Firmware version: 5.5.10.30
- Hardware version: Avalue HID-21V-BTX (21.5 in. screen-Prime) (steel or aluminum chassis)

Optional Hardware

- Accessible-Tactile Interface (ATI-USB) box

COTS Hardware

- UPS: APC SMT-1500C
- UPS: CyberPower PR1500LCD
- UPS: CyberPower PR1500LCD-VTVM
- UPS: Weli WIUL-3KVA
- Printer: HP M402dne
- Election Media
    - USB Memory Device (16GB): Centon S4-CM-U3P2-16.1
    - USB Memory Device (16GB): Apacer EH353-M APHA016GAG0CG-3TM
    - USB Memory Device (8GB): Centon S4-CM-U3P2-8.1
    - USB Memory Device (8GB): Apacer EH353-M APHA008GAG0CG-3TM
    - Smart Cards: ACOS-6-64

COTS Software

- Android 5.1.1 (Avalue)

Optional COTS Software

- None

Optional COTS products

- Headphone: Cyber Acoustics ACM-70, ACM-70B or equivalent
- Sip & puff: Enabling Device #972
- Sip & puff straws: #970K (Pkg of 10)
- Paddle switches: Enabling Device #971
- Paddle switches: AbleNet 10033400 (2x)
- Paddle Switch Cable: Hosa Technology YMM-261 (for use with AbleNet switches)

ImageCast Precinct (ICP)

- Firmware version: 5.5.3-0002
- Hardware version: PCOS-320C
    - Ballot Box Options
        - Stackable Molded Plastic: BOX-330A
        - Foldable Coroplast Plastic: BOX-340C (without Latch)
        - Foldable Coroplast Plastic: BOX-341C (with Latch)
        - Collapsible Plastic: ElectionSource IM-COLLAPSIBLE BIN
        - Accessories: ICP Baseplate Adapter Kit for all listed Ballot Boxes

COTS Software

- Boot Loader (COLILO) 20040221

COTS Hardware

- Election media
    - iButton (Pollworker): Dallas Maxim DS1963S-F5+ (w/Black Key Ring Mount DS9093A+)
    - iButton (Admin/Tech): Dallas Maxim DS1963S-F5+ (w/Blue Key Ring Mount DS9093AB+)
    - Compact Flash Memory Cards (16GB): Centon C4-CM-CF-16.4

Optional COTS Software

- None

2.2 Testing Configuration

The testing event utilized a setup of the DVS ICC G2140 and its components. The following is a breakdown of the DVS ICC G2140 components and configurations for the test setup:

Standard Testing Platform:

The standard testing platform consisted of a central count setup with the following components:

- One Canon DR-G1240 Optical Scanner
- One ICC Workstation
- EMS Components.

Elections and ballots/cards were supplied by Dominion. Once ballots/cards were marked and subsequently cast on the ICC, the polls were closed and tabulation reports were printed, with results being further transported back to the EMS. Results were delivered to the EMS manually. Results were tabulated on the EMS, reviewed and compared, and found consistent with the expected results.

2.3 Test Support Equipment/Materials

All test support equipment/materials required to facilitate testing were supplied by DVS.

3.0 TEST PROCESS AND RESULTS

The following sections outline the test process that was followed to evaluate the D-Suite 5.5-A (GA) to the test goals defined in the scope of this Test Report.

3.1 General Information

All functional and system level testing was conducted by qualified Pro V&V personnel at the Pro V&V facility located in Huntsville, AL.

3.2 Test Cases/Procedures

Test procedures were developed to evaluate the system being tested against the stated requirements. Prior to execution of the required test procedures, the system under test was subjected to testing initialization to establish the baseline for testing and ensure that the test candidate matched the expected test candidate and that all equipment and supplies are present.

The following tasks were completed during the testing initialization:

- Ensure proper system of equipment. Check network connections, power cords, keys, etc.
- Check version numbers of (system) software and firmware on all components.
- Verify the presence of only the documented COTS.
- Ensure removable media is clean.
- Ensure batteries are fully charged.
- Inspect supplies and test decks.
- Record protective counter on all tabulators.
- Review physical security measures of all equipment.
- Record basic observations of the testing setup and review.
- Record serial numbers of equipment.
- Retain proof of version numbers.

3.3 Summary Findings

Summary findings for the System Level Testing (System Integration Testing, Accuracy, and FCA), PCA (including Security Review), and Source Code Review are detailed in the relevant sections of this report. In addition to these areas of testing, a limited TDP Review was performed, as described below.

3.3.1 Technical Documentation Package (TDP) Review

In order to determine compliance of the modified TDP documents with the EAC VVSG 1.0, a limited TDP review was conducted. This review focused on TDP documents that have been modified since the certification of the baseline system. The review consisted of a compliance review to verify that each regulatory, state, or manufacturer-stated requirement had been met based on the context of each requirement. A listing of all modified documents contained in the DVS 5.5-A (GA) TDP is provided in Table 3-1.

Table 3-1: D-Suite 5.5-A (GA) Technical Data Package

Document Number	Description	Document Version
2.02	Democracy Suite System Overview	5.5-A.GA::182
2.03	Democracy Suite ImageCast Central Functionality Description	5.5-A.GA::201
2.08	Democracy Suite ImageCast Precinct System Operation Procedures	5.5-A.GA::289
2.11	Democracy Suite Configuration Management Process	5.5-A.GA::408
Build Documents		
---	Democracy Suite Windows Build Document	5.5-A.GA::36
COTS Supplementals		
---	Canon DR-G2140 User Manual	---
Installation and Configuration		
---	Democracy Suite ImageCast Central Installation and Configuration Procedure	5.5-A.GA::224
User Guides		
---	Democracy Suite ImageCast Central User Guide	5.52-A.GA::133
---	Democracy Suite ImageCast Precinct User Guide	5.5-A.GA::59
---	Democracy Suite EMS Mobile Ballot Production User Guide	5.5-A.GA::2

Summary Findings:

A versioning review was conducted, as well as functionality and compliance reviews on the modifications made following the previous certification testing. This review did not address consistency or completeness of documents. Results of the review of each document were entered on the TDP Review Checklist. Any documents that were revised during the TDP review process were compared with the previous document revision to determine changes made, and the document was re-reviewed to determine whether the discrepancies had been resolved.

During execution of the test campaign, it was verified that the technical documentation provided for D-Suite 5.5-A (GA) was effectively reviewed with any discrepancies that were noted during the review being resolved.

3.3.2 Source Code Review

Pro V&V reviewed the submitted source code to the EAC VVSG 1.0 and the manufacturer-submitted coding standards. Prior to initiating the software review, Pro V&V verified that the submitted documentation is sufficient to enable: (1) a review of the source code and (2) Pro V&V to design and conduct tests at every level of the software structure to verify that design specifications and performance guidelines are met. The source code review was based on the source code changes made since the previous system was certified.

Summary Findings:

During execution of the test procedure, it was verified that the source code provided for the D-Suite 5.5-A (GA) successfully met the requirements. To perform the trusted build, DVS submitted source code, COTS, and third-party software products. These items were inspected and combined to create the executable code. Additionally, during the performance of the trusted build, the build documentation was reviewed. During execution of the Trusted Build, the source code submitted by DVS and reviewed by Pro V&V was successfully built using the submitted COTS and third-party software products, and the reviewed build documentation.

3.3.3 Physical Configuration Audit

The Physical Configuration Audit (PCA) compares the voting system components submitted for certification testing to the manufacturer's technical documentation. The purpose of the PCA was to verify that the submitted hardware is unmodified from the previously certified voting system. The PCA included the following activities:

- Establish a configuration baseline of software and hardware to be tested; confirm whether manufacturer's documentation is sufficient for the user to install, validate, operate, and maintain the voting system
- Verify software conforms to the manufacturer's specifications; inspect all records of manufacturer's release control system; if changes have been made to the baseline version, verify manufacturer's engineering and test data are for the software version submitted for certification
- If the hardware is non-COTS, Pro V&V reviewed drawings, specifications, technical data, and test data associated with system hardware to establish a system hardware baseline associated with the software baseline
- Review manufacturer's documents of user acceptance test procedures and data against system's functional specifications; resolve any discrepancy or inadequacy in manufacturer's plan or data prior to beginning system integration functional and performance tests
- Subsequent changes to baseline software configuration made during testing, as well as system hardware changes that may produce a change in software operation are subject to re-examination

Summary Findings:

During execution of the test procedure, the components of the D-Suite 5.5-A (GA) were documented by component name, model, serial number, major component, and any other relevant information needed to identify the component. For COTS equipment, every effort was made to verify that the COTS equipment had not been modified for use. Additionally, each technical document submitted in the TDP was recorded by document name, description, document number, revision number, and date of release. At the conclusion of the test campaign, test personnel verified that any changes made to the software, hardware, or documentation during the test process were fully and properly documented.

3.3.4 System Level Testing

System Level Testing included the Functional Configuration Audit (FCA), the Accuracy Test, and the System Integration Tests. The Accuracy Test and the System Integration Tests were performed as part of the Regression Test requirements for this campaign. System Level Testing was implemented to evaluate the complete system.

This evaluation utilized baseline test cases as well as specifically designed test cases and included predefined election definitions for the input data. As part of the FCA, one Primary Election and one General Election were executed to verify that each of the submitted modifications had been successfully implemented. The System Integration Tests were performed to verify the D-Suite 5.5-A (GA) functioned as a complete system.

During System Level Testing, the system was configured exactly as it would for normal field use per the procedures detailed in the submitted technical documentation. This included connecting all supporting equipment and peripherals as well as any physical security equipment such as locks and ties.

3.3.4.1 Functional Configuration Audit (FCA) / Regression Testing

During testing, modified functionality was observed to note any changes to documented baseline functionality. The primary focus of the FCA was the incorporation of the modifications to the system.

Regression testing was additionally performed as needed on the system components to verify that all functional and/or software modifications made during the test campaign did not adversely affect the system and its operation.
Summary Findings:

During testing, all modifications performed as documented. No results were encountered suggesting that additional testing was needed.

3.3.4.2 Accuracy

The Accuracy test addressed the capability to successfully mark and record accurate results. After test performance, results were verified on the component. The results were also imported to the EMS where they were compiled and re-verified to be accurate.

Summary Findings:

D-Suite 5.5-A (GA) devices accurately marked and recorded ballot selections and results were accurately transmitted and accumulated into the EMS. During this testing, the Canon DR-G2140 accurately scanned the VVSG required 1,549,703 marks.

3.3.4.3 System Integration

The system level certification tests addressed the integration of the hardware and software. This testing focused on the compatibility of the voting system software components and subsystems with one another and with other components of the voting system as a whole. During test performance, the system was configured as would be for normal field use.

Summary Findings:

One General Election and one Primary Election were successfully exercised on the voting system. The D-Suite 5.5-A (GA), successfully completed the system level integration tests with all results obtained during test execution matching the expected results.

3.3.4.4 Volume and Stress

The Volume & Stress Test consisted of tests designed to investigate the system's response to conditions that tend to overload the system's capacity to process, store, and report data. The test parameters focused on the system's stated limits and the ballot logic for areas such as the maximum number of active voting positions, maximum number of ballot styles, maximum candidates, maximum contests, and stated limits within the EMS. This test was utilized to ensure the system could achieve the manufacturer's TDP claims of what the system can support. Testing was performed by exercising an election definition and test cases developed specifically to test for volume and stress conditions of the D-Suite 5.5-A (GA) system being tested.

Summary Findings

The D-Suite 5.5-A.GA System successfully met the requirements of the Volume and Stress Test. No issues were encountered during testing.

4.0 CONCLUSION

D-Suite 5.5-A (GA), as presented for testing, successfully met the requirements set forth for voting systems in the U.S. Election Assistance Commission (EAC) 2005 Voluntary Voting System Guidelines (VVSG), Version 1.0, with no deficiencies or anomalies noted during testing. Additionally, Pro V&V, Inc. has determined that the D-Suite 5.5-A (GA) functioned as a complete system during System Integration Testing.